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CHAPTER 5. OUTPATIENT OXYGEN THERAPY

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RESCISSIONS

The following material is rescinded:

1. Manual

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CHAPTER 5. OUTPATIENT OXYGEN THERAPY

5.01 POLICY

It is the Department of Veterans Affairs (VA) policy to provide outpatient oxygen therapy to eligible veterans when medically indicated.

5.02 SCIENTIFIC BACKGROUND

a. The use of oxygen therapy in the home on a long-term basis is common practice and can benefit patients with chronic hypoxemia while decreasing their medical care costs.

b. Complications of hypoxemia usually occur below an arterial oxygen tension of 55 mm Hg. A number of beneficial effects of long-term oxygen therapy have been clearly documented:

(1) Reduction in pulmonary arterial pressure and polycythemia,

(2) Improvement in neuropsychologic performance,

(3) Increase in exercise tolerance,

(4) Reduction in the number of hospitalizations, and

(5) Improvement of the quality of life.

c. In patients with hypoxemic chronic obstructive lung disease (COPD) it has been shown that mortality rate is improved by oxygen with the best prognosis in those using oxygen 24 hours a day.

NOTE: In conditions other than COPD, the same quidelines for oxygen use are generally accepted. Oxygen is usually effective when delivered at rates between 1 and 4 liters per minute.

c. Patients may develop marked hypoxemia only during exercise or sleep. Oxygen supplements during sleep and exercise may be helpful to people who have hypoxemia only during these activities.

5.03 POTENTIAL PROBLEMS IN OUTPATIENT OXYGEN THERAPY

a. Patients with hypercapnia (elevated PaC02) may have further elevation of PaC02 associated with uncontrolled oxygen use. This is usually not a problem in the chronic stable patient, but only in the setting of acute illness.

b. The effectiveness of oxygen therapy may be reduced and associated risks are increased in patients who continue to smoke. Careful evaluation of the

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risk and/or benefit ratio should be done before starting or renewing oxygen therapy for smokers.

5.04 PATIENT SELECTION AND CLINICAL INDICATIONS

a. The patient should be on an optimal complete medical regimen. The determination to prescribe supplemental oxygen should be made by a physician knowledgeable in the treatment of chest diseases. Smoking cessation should be strongly recommended.

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b. Documentation of one or more of the following indications for chronic oxygen supplementation should exist before oxygen is prescribed:

(1) Resting arterial oxygen tension (Pa02) below 55 mm Hg while the patient is breathing room air for 20 to 30 minutes, in a stable clinical state. Thus a patient at time of discharge from hospital with an acute respiratory illness would not be considered "stable". In such a situation it will be appropriate to repeat p02 or saturation measurement in 3 or 4 weeks after discharge on room air before making commitment to long term oxygen therapy. Short term oxygen therapy until stability is achieved may be appropriate in some of these patients.

(2) Desaturation by oximetry with a saturation below 88 percent at rest, with exercise, or during sleep, also in a stable clinical state as defined.

(3) Resting arterial oxygen tension (pa02) of 60 mm Hs or less with hypoxic organ dysfunction such as cor pulmonale, erythrocytosis, or hypoxia associated altered mentation.

5.05 MODE AND DURATION OF THERAPY

a. Most patients show an acceptable improvement of arterial oxygen tension on oxygen at 1 to 4 liters per minute. A few patients, particularly those with restrictive lung disorders, may require higher flow rates (e.g., 5 to 8 liters per minute). In these patients, the need for higher oxygen flow rates should be documented by an arterial blood gas or saturation measurement with the patient receiving oxygen.

b. Patients with chronic lung disease and hypoxemia who have been appropriately selected for long term oxygen therapy by establishing that they are in a stable state, usually require treatment permanently.

5.06 TYPES OF OXYGEN EQUIPMENT AND SERVICES

a. The physician responsible for the Respiratory Care Program should be familiar with both the medical and economic aspects of the various methods of delivery. When low flow oxygen is prescribed, it is usually more economical to use an oxygen concentrator. The use of certain fixed flow gauges may prevent waste through unnecessarily high flow rates when tank oxygen is used.

b. Oxygen conserving cannulae, pulse dose delivery devices, and transtracheal catheters are reported to reduce the oxygen consumed by 50 to 75 percent and may be particularly useful with portable systems. It has been demonstrated in several locations that the purchase of concentrators is more economical than rental contracts. The use of liquid oxygen systems, which are substantially more costly, should be limited to those whose activity level will allow them to benefit.

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5.07 PERIODIC REVIEW

These patients should be clinically and physiologically reevaluated for oxygen therapy every 6 months for the first year and at least yearly thereafter in conjunction with the patient's regular medical evaluation. Since most properly selected patients with chronic lung diseases require treatment indefinitely, these evaluations will confirm and document the need for oxygen and the appropriate continuing flow rates.

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